

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING OF A CHANGE

(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

HYLTNER, Jan-Olof
Albihns Stockholm AB
Box 5581
S-114 85 Stockholm
SUÈDE

Date of mailing (day/month/year) 11 June 2001 (11.06.01)	
Applicant's or agent's file reference 60565	IMPORTANT NOTIFICATION
International application No. PCT/SE00/01720	International filing date (day/month/year) 06 September 2000 (06.09.00)

1. The following indications appeared on record concerning: <input type="checkbox"/> the applicant <input type="checkbox"/> the inventor <input checked="" type="checkbox"/> the agent <input type="checkbox"/> the common representative		
Name and Address ALBIHNS PATENTBYRÅ STOCKHOLM AB P.O. Box 5581 S-114 85 Stockholm Sweden	State of Nationality	State of Residence
	Telephone No. +46 8 598 872 00	
	Facsimile No. +46 8 598 873 00	
	Teleprinter No.	
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning: <input type="checkbox"/> the person <input type="checkbox"/> the name <input checked="" type="checkbox"/> the address <input type="checkbox"/> the nationality <input type="checkbox"/> the residence		
Name and Address HYLTER, Jan-Olof Albihns Stockholm AB Box 5581 S-114 85 Stockholm Sweden	State of Nationality	State of Residence
	Telephone No. +46 8 598 872 00	
	Facsimile No. +46 8 598 873 00	
	Teleprinter No.	
3. Further observations, if necessary: The agent's new address on the Demand has been considered as a change under Rule 92bis. In case of disagreement, the International Bureau should be notified immediately.		
4. A copy of this notification has been sent to: <div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> the receiving Office <input type="checkbox"/> the International Searching Authority <input checked="" type="checkbox"/> the International Preliminary Examining Authority </div> <div> <input type="checkbox"/> the designated Offices concerned <input checked="" type="checkbox"/> the elected Offices concerned <input type="checkbox"/> other: </div> </div>		

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer A. Karkachi Telephone No.: (41-22) 338.83.38
----------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT
2011 South Clark Place Room
CP2/5C24
Arlington, VA 22202
ETATS-UNIS D'AMERIQUE
in its capacity as elected Office

Date of mailing (day/month/year) 11 June 2001 (11.06.01)	
International application No. PCT/SE00/01720	Applicant's or agent's file reference 60565
International filing date (day/month/year) 06 September 2000 (06.09.00)	Priority date (day/month/year) 09 September 1999 (09.09.99)
Applicant SAMUELSSON, Ann	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

29 March 2001 (29.03.01)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer A. Karkachi Telephone No.: (41-22) 338.83.38
-----------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------

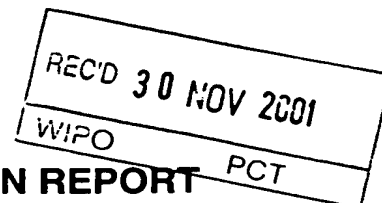
REPLACED BY
ART. 34 PCT

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)





Applicant's or agent's file reference 58496-60565	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/SE00/01720	International filing date (day/month/year) 06/09/2000	Priority date (day/month/year) 09/09/1999
International Patent Classification (IPC) or national classification and IPC A61F13/47		
Applicant SCA HYGIENE PRODUCTS AB et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 3 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 29/03/2001	Date of completion of this report 28.11.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer De Crignis, G Telephone No. +49 89 2399 2332 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/SE00/01720

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

1,3-12	as originally filed			
2	as received on	22/10/2001	with letter of	15/10/2001

Claims, No.:

1-10	as received on	22/10/2001	with letter of	15/10/2001
------	----------------	------------	----------------	------------

Drawings, sheets:

1/3-3/3	as originally filed
---------	---------------------

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/SE00/01720

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	2 - 10
	No:	Claims	1
Inventive step (IS)	Yes:	Claims	2-5, 8-10
	No:	Claims	1, 6, 7
Industrial applicability (IA)	Yes:	Claims	1 - 10
	No:	Claims	

2. Citations and explanations
see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/SE00/01720

Concerning Section V:

Reference is made to the following document:

D1: US-A-5947945
D2: FR-A2-2763839

The present application does not satisfy the criterion set forth in Article 33(2) PCT because the subject-matter of Claim 1 is not new in respect of prior art as defined in the regulations (Rule 64(1)-(3) PCT).

Document (D1), which is considered to represent the most relevant state of the art with respect to claim 1, discloses all features thereof, namely

an absorbent article in the form of a sanitary napkin, a panty liner or an incontinence protector (column 1, lines 16 - 18, column 2, lines 4 - 17)
and comprising a front portion, a rear portion, a liquid-permeable top sheet, a liquid-impermeable backing sheet, and an absorbent body enclosed between the top and backing sheets (column 2, lines 53 - 58),
wherein the rear portion of the article includes a longitudinally extending ridge-shaped elevation that projects out from that side of the article that contains the top sheet (figure 1),
a central string of material extends in the rear portion of the article (figure 1);
and in that the top sheet, the backing sheet and the absorbent body enclosed therebetween (figure 1, column 2, lines 53 - 61)
in the rear portion of the article extend around the long sides of said string.(figure 1).

Hence, all subject-matter of claim 1 is known and it is not novel.

The applicant should consider that the central string of material is not at all defined in this claim. Therefore, the subject-matter of claim 1 lacks novelty over the disclosure of D1. The rewording of claim 1 with reference to claim 1 as originally filed did not change anything in the meaning of the claim. The fact that the topsheet and the backing sheet enclose the absorbent body is known from D1 and from the preamble of the claim.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/SE00/01720

The structural construction of the central string is considered to be different in the present application. However, this is not expressed in the claim. The general information that the central string extends in the rear portion of the article is not sufficient in order to differentiate the present claim over the disclosure of D1.

The same arguments are valid for D2. D2 does not disclose a topsheet or backsheet *expressis verbis*. However, without such a topsheet or backsheet, the article is not capable of its desired function. Therefore, it is obvious that such an article will have a topsheet and a backsheet. D2 discloses a triangular construction of absorbent material in the rear centre of the article. Such a triangular construction can be considered equivalent to a string. Therefore, the subject-matter of claim 1 does not involve an inventive step over the disclosure of D2.

Independent claim 8 refers to a method of manufacturing such an article. The characterising portion is not known from any of the available prior art.

Dependent Claims 6 and 7 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, involve an inventive step for the following reasons:

The subject-matter of claims 6 and 7 is known from D1, see figures 1 and 2A-2C.

The combination of the features of dependent claims 2 to 5 is neither known from, nor rendered obvious by, the available prior art.

Concerning Section VII:

To meet the requirements of Rule 5.1(a)(ii) PCT, the documents D1 and D2 should have been identified in the description and the relevant background art disclosed therein should be briefly discussed.

The present invention aims to provide an absorbent article of the aforesaid kind in which the ridge-like part curves gently and has been produced without including an insert in the absorbent body.

5 SUMMARY OF THE INVENTION

10 These objects are achieved in accordance with the invention with an absorbent article in the form of a sanitary napkin, a panty liner or an incontinence protector which includes a front portion, a rear portion, a liquid-permeable top sheet, a liquid-impermeable backing sheet, and an absorbent body or pad enclosed between the top sheet and backing sheet, said article having in its rear portion a longitudinally outstanding part which extends in the form of a ridge from that side of the article that includes the top sheet, said article being characterised in that a central string of material extends in the rear portion of the article, and in that the absorbent body enclosed between the top and backing sheets extends around
15 the long sides of said string in the rear portion of the article. Folding of the absorbent body around a string of material results in a gently rounded ridge-like elevation.

In one preferred embodiment of the invention, the string comprises a rear portion of a longitudinally extending strip of flexible material that presents a high coefficient of friction to textile material and which extends in the front and the rear portions of the article and is
20 attached to the backing sheet on that side thereof distal from the absorbent body. This ensures that the front portion of the article will not move relative to the undergarments of the wearer when the article is in use.

25 Those parts of the article which extend around the long sides of the string of tape material extending in the rear portion of the article abut with and are attached to each other in at least one place. The strip of flexible material is preferably comprised of an elastic foam material which is mounted in a stretched state in the rear portion of the article and in a relaxed state in the front portion of said article, wherewith mutually adjacent parts of the string of strip material are fastened together in at least one place. The strip extends
30 symmetrically on both sides of the longitudinal symmetry axis of the article and has in the

CLAIMS

1. An absorbent article in the form of a sanitary napkin, a panty liner or an incontinence protector and comprising a front portion, a rear portion, a liquid-permeable top sheet (2), a liquid-impermeable backing sheet (3), and an absorbent body (1) enclosed between the top and backing sheets, wherein the rear portion of the article includes a longitudinally extending ridge-shaped elevation (9) that projects out from that side of the article that contains the top sheet, characterised in that a central string of material (8) extends in the rear portion of the article; and in that the absorbent body (1) between the top sheet (2) and the backing sheet (3) in the rear portion of the article extends around the long sides of said string.
2. An absorbent article according to Claim 1, characterised in that the string (8) comprises a rear portion of a longitudinally extending strip (6) of flexible material that has a high coefficient of friction with respect to textile material and which extends in the front and the rear portion of the article and is fastened to the backing sheet (3) on that side thereof that lies distal from the absorbent body (1).
3. An absorbent article according to Claim 1 or 2, characterised in that those portions of the article which, in the rear portion of said article, extend around the long sides of the string (8) of strip material abut one another and are fastened to each other in at least one place.
4. An absorbent article according to Claim 1, 2 or 3, characterised in that the strip (6) of flexible material is an elastic foam material.
5. An absorbent article according to Claim 4, characterised in that the elastic fibre material is mounted in the rear portion of the article in a stretched state and in the front portion of the article in a relaxed state.

6. An article according to any one of Claims 4-5, characterised in that mutually adjacent portions of the material in the string (8) of strip material are fastened to each other in at least one place.

5 7. An article according to any one of the preceding Claims, characterised in that the strip (6) extends symmetrically on both sides of the longitudinal symmetry axis (A-A) of the article and has in the front portion of said article a width which is greater than half the smallest width of the article in its front portion.

10 8. A method of manufacturing an absorbent article which comprises a front portion and a rear portion and which includes a longitudinally extending elevated section in its rear portion, wherein the method comprises the steps of

(a) placing a body of absorbent material on a first sheet that comprises a liquid-impermeable material;

15 (b) placing on the body of absorbent material a second sheet that comprises liquid-impermeable material, and joining together the first and second sheets in those parts of the sheets that extend beyond the body of absorbent material, therewith forming a generally flat composite body,

characterised by the further steps of

20 (c) placing on the second sheet of the composite body a strip of flexible material that extends over at least a part of a front and a rear portion of the composite body;

(d) fastening the strip to the second sheet in the front portion of the composite body;

(e) forming that part of the strip which extends in the rear portion of the composite body into a longitudinally extending string; and

25 (f) folding those parts of the composite body that lie on respective sides of the longitudinal string of strip material in around said string and fastening said parts together in at least one place.

30 9. A method according to Claim 8, characterised in that the strip is comprised of an elastic material; and in that the part of said strip that extends in the rear portion of the composite body is stretched prior to carrying out step (f).

10. A method according to Claim 8 or 9, characterised in that the longitudinally extending string is shaped by folding or rolling the strip together.

5 11. A method according to Claim 8, 9 or 10, characterised by fastening the parts of the composite body that have been folded-in on respective sides of the longitudinal string of strip material to said string in at least two longitudinally spaced sections that extend around the string circumference.

10 12. A method according to any one of Claims 8-11, characterised by forming that part of the strip (29) which extends in the rear portions of the composite body (3) into a longitudinally extending string (32) prior to placing the strip (29) on the composite body (30).